

### **Amendments to the Claims**

This listing of claims will replace all prior versions and listings of claims in the application.

#### **Listing of Claims:**

Please amend the claims as follows:

1. (Currently amended) A system for an asymmetric digital subscriber line (ADSL) access network for providing ADSL provision flow control at a digital subscriber line access multiplexer (DSLAM) switch, comprising:

a network management system in communication with an element management system that is in communication with the DSLAM switch, the network management system including a control algorithm for controlling ADSL provision flow on a DSLAM switch by introducing a two level semaphore including a first semaphore and a second semaphore; ~~and~~

a[[n]] first object defined by the network management system for representing that a batch process is requesting activity on the DSLAM switch; and

a second object defined by the network management system for representing that a graphic user interface (GUI) operator is requesting activity on the DSLAM switch wherein a request of the GUI operator bypasses requests of the batch process and is processed with priority;

wherein the first semaphore controls a first provision request flow at the element management system level and the second semaphore controls a second provision request flow at the DSLAM switch level.

2. (Previously presented) The system according to claim 1, further comprising the element management system in communication with the DSLAM switch.

3. (Previously presented) The system according to claim 2, further comprising at least one of the following:

a plurality of DSLAM switches in communication with the element management system;  
and

a semaphore count register in communication with the control algorithm.

4. (Canceled)

5. (Canceled)

6. (Currently amended) A system for an asymmetric digital subscriber line (ADSL) access network for providing ADSL provision flow control at a digital subscriber line access multiplexer (DSLAM) switch, comprising:

means for managing an ADSL access network element in communication with means for multiplexing an ADSL subscriber line and in communication with means for managing the ADSL access network; and

at least one of the following:

the means for multiplexing the ADSL subscriber line;

the means for managing the ADSL access network; and

means for tracking a semaphore in communication with the control algorithm[[.]];

wherein the means for managing the ADSL access network includes means for controlling ADSL provision flow on a DSLAM switch by introducing a two level semaphore including a first semaphore and a second semaphore;

wherein the first semaphore controls a first provision request flow at the means for managing the ADSL network element level and the second semaphore controls a second provision request flow at the means for multiplexing level; and

wherein the system includes the means for managing the ADSL access network further comprising a[[n]] first object whose attribute is defined by the means for managing the ADSL access network for representing that a batch process is requesting activity on the means for multiplexing the ADSL subscriber line and a second object whose attribute is defined by the means for managing the ADSL access network for representing that a GUI operator is requesting activity on the means for multiplexing the ADSL subscriber line wherein a request of the GUI operator bypasses requests of the batch process and is processed with priority.

7. (Canceled)

8. (Original) The system according to claim 6, further comprising a plurality of means for multiplexing an ADSL subscriber line in communication with the means for managing an ADSL access network element.

9. (Canceled)

10. (Canceled)

11. (Currently amended) A method of providing asymmetric digital subscriber line (ADSL) provision flow control at a digital subscriber line access multiplexer (DSLAM) switch, comprising:

sending a provision request from a network management system to a DSLAM switch;  
determining whether a DSLAM level semaphore is available at the DSLAM switch;  
delaying when the DSLAM level semaphore is not available wherein the delaying is different between a GUI order and a batch order;  
determining whether an element management system level semaphore is available; and  
connecting the network management system to the DSLAM switch;  
wherein the GUI order bypasses the batch order and is processed with priority.

12. (Canceled)

13. (Previously presented) The method according to claim 11, wherein delaying comprises delaying the provision request via a delay loop for 10-15 seconds.

14. (Original) The method according to claim 11, further comprising determining whether a connection is being configured on a corresponding DSLAM switch when the DSLAM level semaphore is available at the DSLAM switch.

15. (Original) The method according to claim 14, further comprising locking the DSLAM level semaphore to the DSLAM switch when a connection is being configured on the DSLAM.

16. (Original) The method according to claim 14, further comprising blocking other connection requests on the DSLAM switch when a connection request is being configured on the DSLAM switch.

17. (Original) The method according to claim 11, further comprising releasing the DSLAM level semaphore when the element management system semaphore is not available.

18. (Original) The method according to claim 17, further comprising delaying after releasing the DSLAM level semaphore.

19. (Previously presented) The method according to claim 18, wherein delaying comprises delaying for 10-15 seconds.

20. (Currently amended) A method of providing asymmetric digital subscriber line (ADSL) provision flow control at a digital subscriber line access multiplexer (DSLAM) switch, comprising:

- determining whether a provision request for a DSLAM switch was issued by a GUI operator;

- resetting an attribute associated with the provision request made by the GUI operator;

- determining whether a batch provision request acquired a semaphore; and

- delaying for a predetermined period when the batch provision request does not acquire the semaphore;

- wherein the provision request issued by the GUI operator bypasses the batch provision request and is processed with priority.

21. (Original) The method according to claim 20, wherein resetting an attribute comprises resetting an object associated with the provision request made by the GUI operator.

22. (Original) The method according to claim 20, wherein determining whether a provision request was issued by a GUI operator comprises determining whether a GUI request flag is set.

23. (Original) The method according to claim 20, further comprising determining whether there is a batch process provision request when there is no provision request for a DSLAM switch issued by the GUI operator.

24. (Original) The method according to claim 23, wherein determining whether a provision request was issued by a batch process comprise determining whether a batch request flag is set.

25. (Canceled)

26. (Previously presented) The method according to claim 20, further comprising processing the batch provision request.

27. (Canceled)

28. (Currently amended) A computer-readable storage medium having computer-readable instructions which, when executed on a computer, will cause the computer to perform a method of providing control algorithm comprising control logic for causing a computer to provide asymmetric digital subscriber line (ADSL) provision flow control at a digital subscriber line access multiplexer (DSLAM) switch, the method comprising control logic comprising computer instructions for causing the computer to:

sending a provision request to the DSLAM switch to establish a virtual circuit;  
determine[[e]]ing whether a DSLAM level semaphore is available at the DSLAM switch;  
determine[[e]]ing whether an element management system level semaphore is available;  
connecting a network management system to the DSLAM switch in response to the DSLAM level semaphore and the element management system level semaphore being available;  
and

delaying when the DSLAM level semaphore is not available;

wherein, when the provision request comprises a request of a GUI operator, the request of the GUI operator is processed with priority and bypasses requests of a batch process.

29. (Canceled)

30. (Currently amended) The computer-readable storage medium control algorithm according to claim 28[[,]] further comprising ~~computer instructions for causing the computer to~~ determine[[e]]ing whether a connection is being configured on a corresponding DSLAM switch when the DSLAM level semaphore is available at the DSLAM switch.

Claims 31-32 (Canceled)

33. (New) A system for an asymmetric digital subscriber line (ADSL) access network for providing ADSL provision flow control at a digital subscriber line access multiplexer (DSLAM) switch, comprising:

a network management system in communication with an element management system that is in communication with the DSLAM switch, the network management system including a control algorithm for controlling ADSL provision flow on a DSLAM switch by introducing a two level semaphore including a first semaphore and a second semaphore; and

an object defined by the network management system for representing that a batch process is requesting activity on the DSLAM switch;

wherein the first semaphore controls a first provision request flow at the element management system level and the second semaphore controls a second provision request flow at the DSLAM switch level.

34. (New) A system for an asymmetric digital subscriber line (ADSL) access network for providing ADSL provision flow control at a digital subscriber line access multiplexer (DSLAM) switch, comprising:

means for managing an ADSL access network element in communication with means for multiplexing an ADSL subscriber line and in communication with means for managing the ADSL access network; and

at least one of the following:

the means for multiplexing the ADSL subscriber line;

the means for managing the ADSL access network; and

means for tracking a semaphore in communication with the control algorithm[.];

wherein the means for managing the ADSL access network includes means for controlling ADSL provision flow on a DSLAM switch by introducing a two level semaphore including a first semaphore and a second semaphore;

wherein the first semaphore controls a first provision request flow at the means for managing the ADSL network element level and the second semaphore controls a second provision request flow at the means for multiplexing level; and

wherein the system includes the means for managing the ADSL access network further comprising an object whose attribute is defined by the means for managing the ADSL access network for representing that a batch process is requesting activity on the means for multiplexing the ADSL subscriber line.